or

- (4) Discontinues the prosecution of the work, or
- (5) Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- (7) Allows any final judgment to stand against him unsatisfied for a period of ten (10) days, or
- (8) For any other cause whatsoever, fails to carry on the work in an acceptable manner.

the Director will give notice in writing to the Contractor and his surety of such delay, neglect, or default.

If the Contractor, within a period of ten (10) days after such notice, does not proceed to remedy the delay, neglect or default the State may take any action deemed appropriate. The State may appropriate and use any or all materials and equipment as may be suitable and acceptable and may contract for the completion of the project according to the terms and provisions thereof, or use such other methods as in the opinion of the Director will be required for the completion of the project in an acceptable manner.

All costs and charges incurred by the State, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due to the Contractor had he been allowed to complete the work under the contract. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the State the amount of such excess.

**8.10** JUSTIFIABLE CAUSE FOR TERMINATION OF CONTRACT—In the event of a finding by the Director that a national emergency exists which creates a shortage of materials, labor, or equipment, and that such emergency will probably continue to exist for an unreasonable length of time, by reason of which the Contractor will be unable to proceed with the construction contract, or for any other legally justifiable cause, the State may cancel such construction contract, or any part thereof, under the terms hereinafter provided.

If the contract or any portion thereof is cancelled and the Contractor released before all items of work included in the contract have been completed, payment will be made at contract unit prices for the actual work performed, or agreed prices where no unit price is contained in the contract for any particular item of work. The Contractor shall be reimbursed for such expenditures as in the judgment of the Director are not otherwise compensated for, and as are required in preparing for and moving to and from the work, the intent being that an equitable settlement shall be made with the Contractor. No claim for loss of anticipated profits shall be considered.

Materials obtained by the Contractor for the work that have been inspected, tested, and accepted by the Director, and that are not incorporated in the work, and which have been properly stored and maintained, shall be purchased from the Contractor at actual cost as shown by receipted bills or other proper evidence of actual cost, at such points of delivery as may be designated by the Director.

## ARTICLE IX—MEASUREMENT AND PAYMENT

9.1 MEASUREMENT OF QUANTITIES—All work acceptably completed under the con-

tract will be measured by the Director according to United States standard measure.

A station when used as a term of measurement means 100 linear feet.

The methods of measurement and computation to be used in determining the quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the Director.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions in accordance with the method of measurement stated in these specifications.

All items which are measured by the linear foot will be measured parallel to the base or foundation upon which such structures are placed, unless otherwise shown on the plans or indicated in the Special Provisions.

In computing volumes of excavation the average end area method will be used. Other methods may be used if approved.

The term "gage," when used in connection with the measurement of plates, will mean the U. S. Standard Gage, except that when reference is made to the measurements of galvanized sheets used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing, then the term "gage" will mean that specified in the A.A.S.H.T.O. M 36, M 167, M 196, M 197 or M 219.

When the term "gage" refers to the measurement of wire, it will mean the wire gage specified in the A.A.S.H.T.O., M 32.

The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois. All materials which are measured by weight shall be weighed at locations designated by the Director on scales approved by qualified personnel. Trucks used to haul material measured by weight shall be weighed empty at such time as the Director may order, and each truck shall bear a plainly legible identification mark. The Contractor shall notify the Director twenty-four (24) hours prior to hauling any material the payment for which is based on weight.

Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable to the Director, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.

Quantities of material wasted or disposed of in a manner not called for under the contract; rejected loads of material, including material rejected after it has been placed by reason of the failure to conform to the provisions of the contract; material not unloaded from the transporting vehicle; material placed outside of the lines indicated on the plans or given by the Director; or material remaining on hand after completion of the work will not be paid for and such quantities will be deducted from the final total measured quantities. No compensation will be allowed for hauling rejected material.

When requested by the Contractor and approved by the Director in writing, material specified to be measured by the cubic yard may be weighed, and such weights converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the Director and shall be agreed to by the

Contractor before such method of measurement of pay quantities is used.

Cement, if measured by the barrel or by the bag, will mean 376 pounds of cement in a barrel and 94 pounds of cement in a bag.

The term "lump sum" when used in connection with an item of payment, means payment for the complete item described in the contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories unless otherwise specified.

Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the project unless special equipment has been ordered by the Director in connection with force account work, in which case travel time and transportation to the project will be measured if approved by the Director. If equipment has been ordered held on the job on a standby basis by the Director, half time rates for the equipment will be paid.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit and others, and these items are identified by *gage*, unit weight, or section dimensions, such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

9.2 SCOPE OF PAYMENT—The Contractor's bid price sha ll be inclusive of all costs, direct or indirect, required for the fulfillment of the contract.

Contract payments to the Contractor by the State shall be full payment, including all taxes, for furnishing all materials, labor, equipment, tools, and incidentals necessary for the completed work, and for performing all work contemplated and embraced in the contract; and also for all loss or damage arising out of the nature of the work or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work and for all risks of every description connected with the prosecution of the work, and all expenses incurred by, or in consequence of the suspension or discontinuance of the work as herein provided; also for any infringement of patent, trademark or copyright, and for completing the work in an acceptable manner according to the plans and specifications.

For any item of work in the proposal, unless specifically provided for otherwise, the contract unit price, or lump sum price, for such item shall include all material, labor, equipment, tools and incidentals required for the complete item of work.

- 9.3 COMPENSATION FOR ALTERED QUANTITIES—When the accepted quantities of work vary from the quantities in the proposal schedule, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract unit prices for the accepted quantities of work done. No allowance except as provided in Section 4.2 will be made for any increased expense, failure to recover costs or for loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items or overhead expense on the part of the bidder and subsequent failure to recover the costs thereof or from any other cause.
- 9.4 EXTRA AND FORCE ACCOUNT WORK—Work performed in accordance with the requirements and provisions of Section 4.3 will be paid for at the unit prices or lump sum prices stipulated in the order authorizing the work or, if on a force account basis, the Contractor shall be compensated in the following manner:

A. LABOR—For all labor (including foremen when authorized by the Director), the Contractor will receive the rate of wage including fringe benefits required by the applicable collective bargaining agreement or other employment contract, which shall be agreed upon in writing before beginning work for each and every hour that said labor is actually engaged in said work.

An amount equal to twenty (20) per cent of the actual labor cost to cover the Contractor's and subcontractor's operating expense, overhead and profit will be paid the Contractor.

No allowance for overtime compensation will be given without the written approval of the Director prior to performance of overtime work.

- B. **INSURANCE AND TAX**—The Contractor will also receive the actual costs paid for property damage, liability and workmen's compensation insurance premiums, State unemployment contributions, Federal unemployment taxes and social security taxes to which six (6) per cent shall be added.
- C. MATERIALS—For materials accepted by the Director and used, the Contractor shall receive the actual cost of such materials delivered and incorporated into the work, including transportation charges paid by him, to which twenty (20) per cent will be added.
- D. EQUIPMENT—For any machinery or special equipment (other than small tools and manual equipment) including fuel, lubricants, and repairs plus transportation costs, the use of which has been authorized by the Director, the Contractor shall receive the rental rates agreed upon in writing before such work is begun for the actual hours or any fraction thereof that such equipment is in operation on the work. No percentage shall be added to the equipment rental rates. If equipment rental rates are provided in the specifications, such rates shall be used.

All equipment shall be in good working condition and suitable for the purpose of which the equipment is to be used. Rental time will not be allowed while the equipment is inoperative due to breakdowns, delays or other such causes.

For equipment used three (3) consecutive working days or less, the hourly rental rate shall be the daily rate divided by eight (8); for equipment used four (4) consecutive days or more, but not more than two (2) consecutive weeks, the hourly rental rate shall be the weekly rental rate divided by forty (40); for equipment used for more than two (2) consecutive weeks, the hourly rental rate shall be the monthly rate divided by 176.

The rental time to be paid for use of equipment on a force account basis shall be the time the equipment is doing actual work and used exclusively for the force account work. The following provisions shall govern in determining the compensation to be paid to the Contractor:

- The location from which the equipment is to be moved or transported shall be approved by the Director.
- (2) The rental period shall begin at the time the equipment is unloaded at the site of the force account work, excluding Saturdays, Sundays and legal holidays, unless the force account work is performed on such days, and shall terminate at the end of the day on which the Director directs the Contractor to discontinue the use of such equipment. The maximum rental period to be paid for per day shall not exceed eight (8) hours unless the equipment is in operation for a longer time with the approval of the Director.
- (3) Where the equipment must be transported to the site of force account work,

the Department will pay the cost of transporting the equipment, including its loading and unloading, from its original location to the site of the force account work. Upon completion of the work the Department will pay the cost of transporting the equipment back to its original location or to another location, whichever cost is less.

The cost of transporting the equipment shall not exceed the rates established by the State Public Utilities Commission. If such rates are nonexistent, then the rates will be determined by the Director based upon the prevailing rates charged by established haulers within the locale.

- (4) Where the equipment is self-propelled, the Department will pay the cost of moving the equipment by its own power from its original location to the site of the force account work. Upon completion of the work the Department will pay the cost of moving the equipment back to its original location or to another location whichever cost is less.
- E. STATE EXCISE TAX—A sum equal to the current percentage rate for the State excise tax on the total sum determined in (a), (b), (c) and (d) above, shall be added as compensation to the Contractor.

The compensation determined in (a), (b), (c) and (d) above, shall be deemed to be payment in full for work done on a force account basis, including superintendence, overhead, use of tools and equipment for which no rental is allowed, profit, all taxes, subcontracting and other costs in connection therewith which are not provided for herein.

- F. RECORDS—The Contractor and the Director shall compare records of the cost of work done as ordered on a force account basis at the end of each day. These daily records shall thereafter be deemed to be the basis for payment of the force account work.
- G. STATEMENTS—No payment will be made for work performed on a force account basis until the Contractor has furnished the Director with duplicate, itemized statements of the cost of such force account work detailed as follows:
  - (1) Laborers—Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman and also the amount of fringe benefits payable, if any.
  - (2) Equipment—Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
  - (3) Materials

aQuantities of materials, prices, and extensions.

LCost of transporting materials, if such cost is not reflected in the prices of the materials.

(4) Insurance—Cost of property damage, liability and workmen's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by receipt invoices for all materials used and transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from his stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

**9.5 ELIMINATED ITEMS**—If the contract item of the work is eliminated and no change order was executed covering the elimination, the Contractor will be paid for the actual costs incurred in connection with such eliminated contract item if these costs had been incurred prior to the date of notification in writing of such elimination by the Director.

If acceptable material is ordered by the Contractor for the eliminated item prior to the date of notification of such elimination by the Director, and if orders for such materials cannot be cancelled, it will be paid for at the actual cost to the Contractor. In such cases the material paid for shall become the property of the State, and the actual cost of any further handling will be paid for by the State. If the material is returnable to the vendor and if the Director so directs, the material shall be returned, and the Contractor will be paid for the actual cost of charges made by the vendor for returning the material. The State shall also pay the actual cost of handling returned material.

The actual costs or charges to be paid by the State to the Contractor will be computed in the same manner as if the work were to be paid for on a force account basis.

- **9.6 ASSIGNMENT OF PAYMENTS**—All monies payable under the contract, or any part thereof, shall be paid to the Contractor in accordance with the provisions of this Article, and no assignment or order executed by the Contractor directing payment of any portion or all of such funds to any other person or persons shall be recognized by the State unless such assignment or order specifies the amounts to be so paid and the purposes for which the assignment or order is given. Such assignment or order shall be attached thereto, by endorsement or otherwise, the consent of the surety. No such assignment or order shall be binding on the State.
- 9.7 PAYMENT FOR MATERIALS—Payments may be made to the extent of the cost to the Contractor of approved materials to be incorporated in the work, when delivered on the project site or stored in acceptable storage places in the vicinity of the project. Payments may also be made to the extent of the Contractor's cost for certain approved materials furnished and acceptably stored in a fabricator's yard provided such storage yard is within the State of Hawaii and the Contractor furnishes evidence satisfactory to the Director that such materials are identified for use on the project and that such materials cannot be reasonably used elsewhere. Payments authorized under this Section shall not exceed the bid price of such item and shall not constitute final acceptance. The Contractor shall be responsible for such materials.

Payment for material does not, in any way, relieve the Contractor from his obligation under the terms of the contract to furnish and to incorporate the material into the work according to the specifications.

No payment will be made for living or perishable plants until planted.

Payment for materials under this Section will not be made unless the vendor's invoice for the materials is submitted to the Director.

**9.8 PROGRESS PAYMENTS**—The Director will make an estimate in writing each month based on the items of work performed and materials incorporated in the work and the value therefor at the unit prices or lump sum prices set forth in the contract. All progress estimates and payments will be approximate only and shall be subject to correction at any time prior to or in the final estimate and payment. Each month as used herein shall mean the one period of time between the 16th day of one month and the 15th day of the succeeding month.

No progress payment will be made when the total value of the work done since the last estimate amounts to less than \$500.00.

If the Director finds that satisfactory progress is being made:

- A. An amount equivalent to 5 percent of the first 50 percent of the whole will be deducted from the total of the amounts ascertained as payable and retained by the Department until after completion of the entire contract in an acceptable manner.
- B. After 50 percent of the work has been completed, the Department may make any of the remaining progress payments in full.

If the Director finds that unsatisfactory progress is being made, the Department may, from the beginning of such unsatisfactory progress, withhold any amount up to 5 percent of any subsequent progress payments.

**9.9 ACCEPTANCE AND FINAL PAYMENT**—When the project has been accepted as provided in Section 5.12, the Director will prepare the final estimate of the quantities of the various classes of work performed. After the Contractor accepts such final estimate, he will be paid the entire sum found to be due after deducting all previous payments and all amounts to be retained or deducted under the provisions of the contract.

All prior progress estimates and payments shall be subject to correction in the final estimate and payment.

Final payment will not be made until the Contractor has filed with the Department the following:

- (1) Consent of the surety to payment of the final estimate;
- (2) Satisfactory evidence by affidavit that all debts resulting from the contract have been fully paid or satisfactorily secured;
- (3) Tax clearance from the Director of Taxation that all delinquent taxes levied or allowed under State statutes have been paid in accordance with Section 103-55, H.R.S.;
- (4) Properly executed non-gratuity affidavit similar to copy annexed hereto.

The filing of willfully false affidavits will disqualify the Contractor from bidding on future work of the State.

**9.10 RECORDS, ACCOUNTS AND DOCUMENTS**—All records, accounts and documents of the Contractor and his subcontractors, if any, in connection with the work performed under the terms of the contract, shall be retained and preserved for a period of not less than three (3) years from the date of final payment to the Contractor for the project and shall be available for inspection and auditing by representatives of the Department and other participating agency or agencies, if any, at the respective offices of the Contractor and his subcontractors. During such inspection and auditing of the records, accounts and documents, the Contractor shall assist in every way possible without cost to the State.

## 9.11 WARRANTY OF CONSTRUCTION-

A. In addition to any other warranties that may be set out elsewhere in this contract, the Contractor warrants that the work performed under this contract conforms to the contract requirements and is free of any defect of equipment, material or design furnished, or workmanship performed by the Contractor or any of his subcontractors or suppliers at any tier. Such warranty shall continue for a period of one year from the date of final acceptance of the work, but with respect to any part of the work which the State takes possession of prior to final acceptance, such warranty shall continue for a period of one (1) year from the date the State takes possession.

Under this warranty, the Contractor shall remedy at his own expense any such failure to conform or any such defect. In addition, the Contractor shall remedy at his own expense any damage to State owned or controlled real or personal property when that damage is the result of the Contractor's failure to conform to contract requirements or any such defect of equipment, material, workmanship, or design. The Contractor shall also restore any work damaged in fulfilling the terms of this clause. The Contractor's warranty with respect to work repaired or replaced hereunder will run for one year from the date of such repair or replacement.

- B. The State shall notify the Contractor in writing within a reasonable time after the discovery of any failure, defect, or damage.
- C. Should the Contractor fail to remedy any failure, defect, or damage described in Paragraph A above within a reasonable time after receipt of notice thereof, the State shall have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the Contractor's expense.
- D. In addition to the other rights and remedies provided by this clause, all subcontractors', manufacturers', and suppliers' warranties expressed or implied, respecting any work and materials shall, at the direction of the State, be enforced by the Contractor for the benefit of the State. In such case if the Contractor's warranty under Paragraph A above has expired, any suit directed by the State to enforce a subcontractor's, manufacturer's or supplier's warranty shall be at the expense of the State. The Contractor shall obtain any warranties which the subcontractors, manufacturers, or suppliers would give in normal commercial practice.
- E. If directed by the Director, the Contractor shall require any such warranties to be executed in writing to the State.
- F. Notwithstanding any other provision of this clause, unless such a defect is caused by the negligence of the Contractor or his subcontractors or suppliers at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the State nor for the repair of any damage which results from any such defect in State furnished material or design.
- G. The warranty specified herein shall not limit the State's rights under Section 5.12 Acceptance of these specifications with respect to latent defects, gross mistake, or fraud.